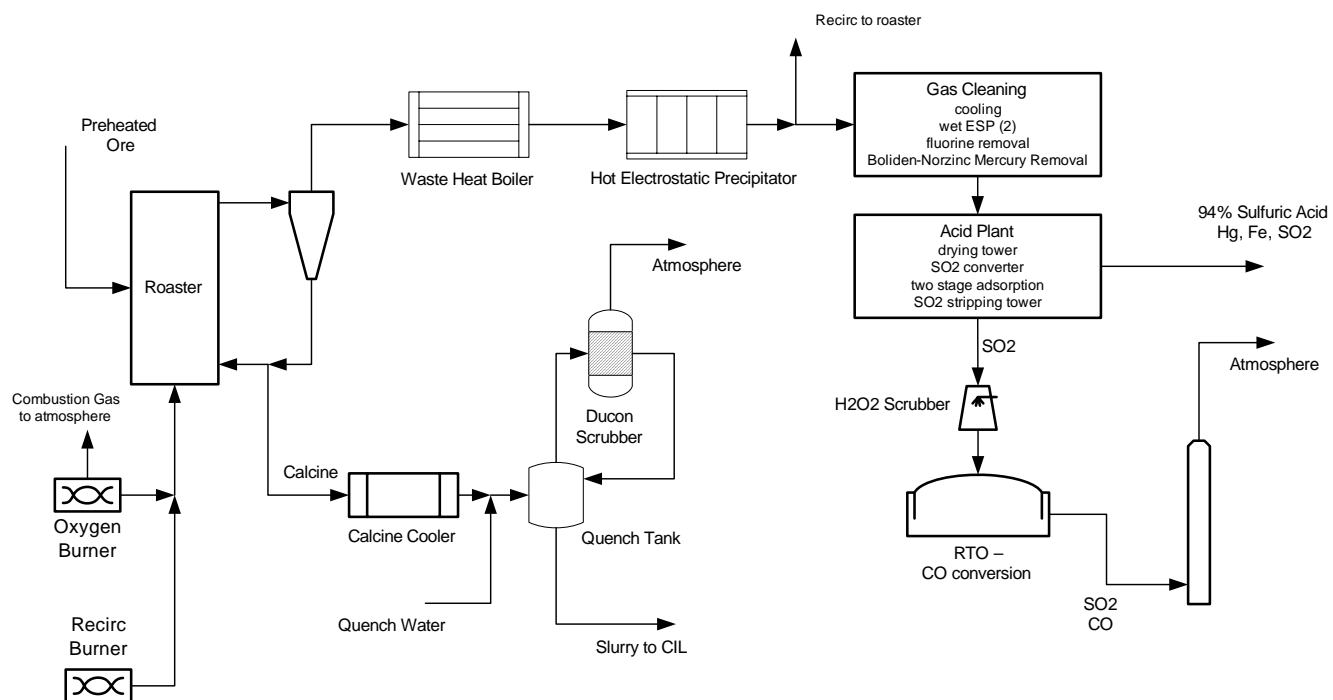
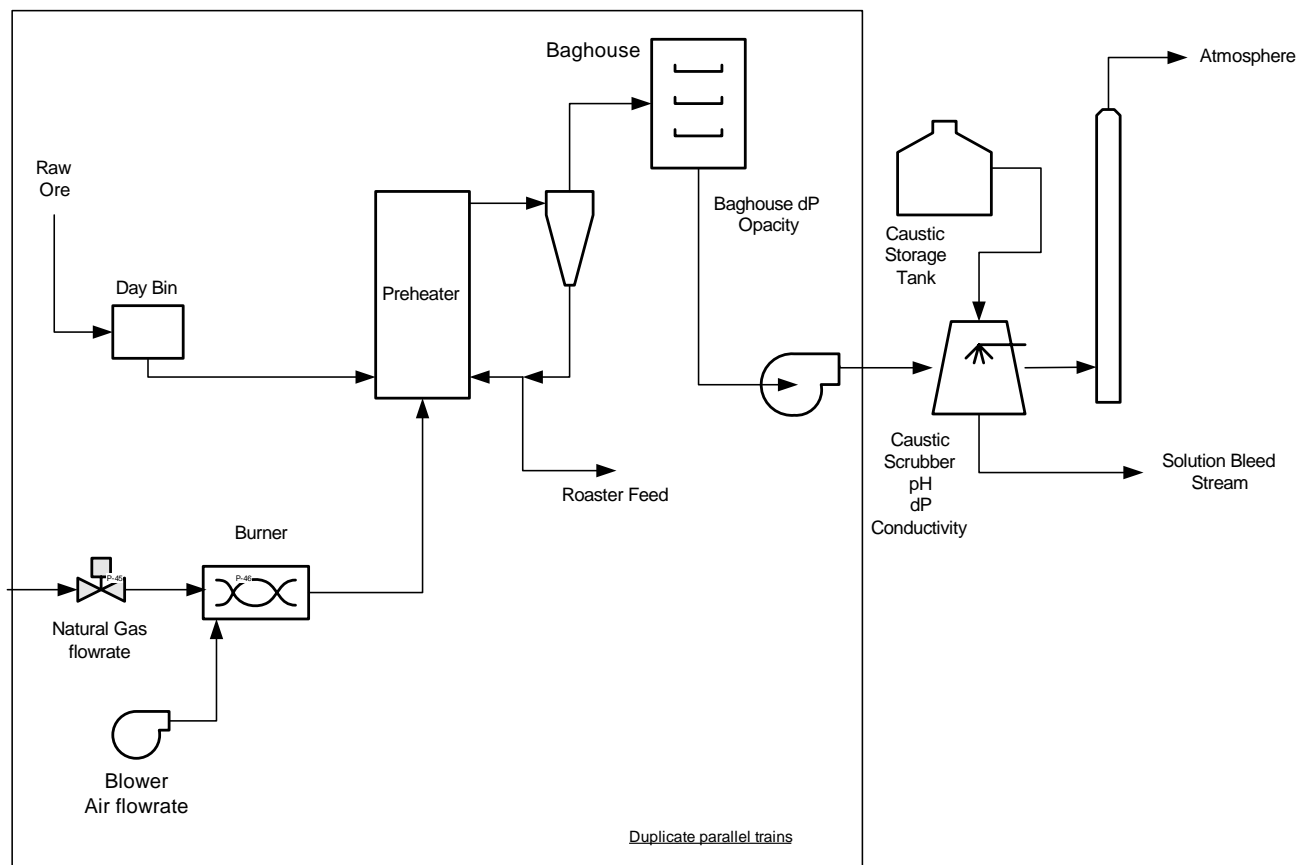


Newmont Mining Corporation-Gold Quarry Operations Area Ore Roaster

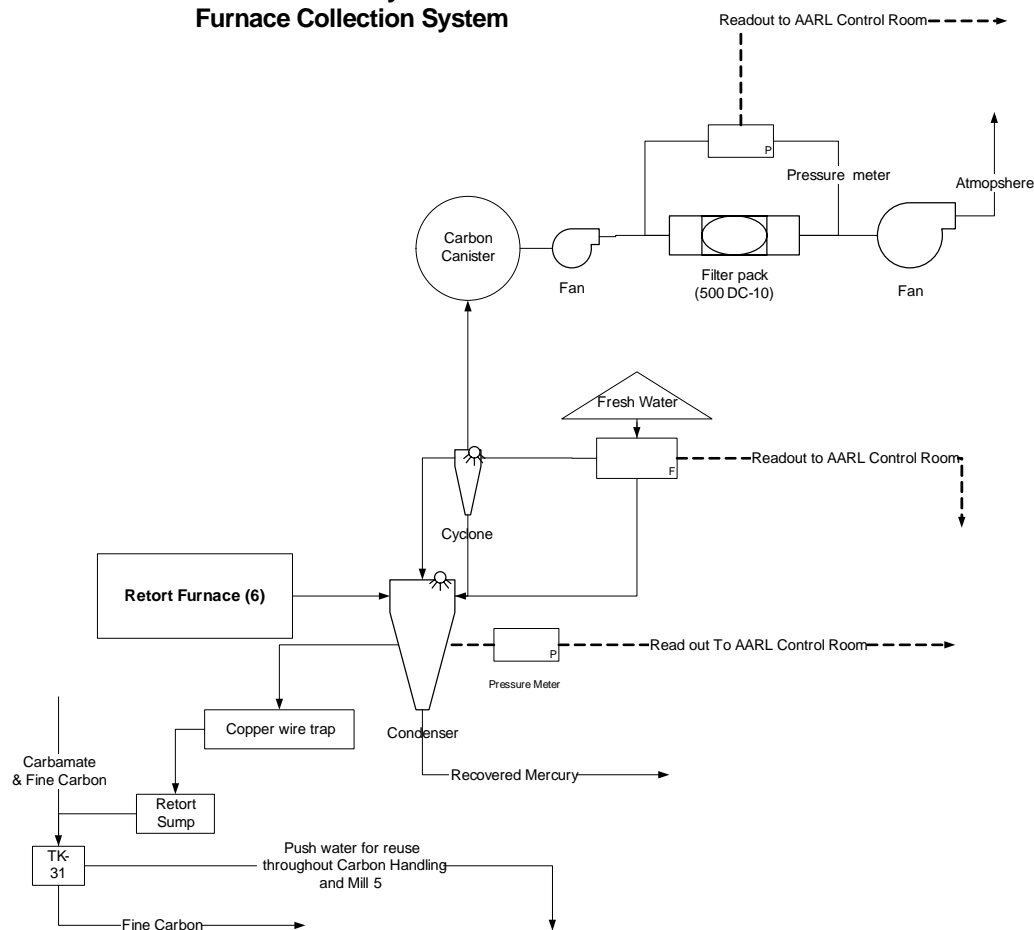


Newmont Mining Corporation-Gold Quarry Operations Area Ore Preheaters



Newmont Mining Corporation-Gold Quarry Operations Area Mercury Retorts

Carlin Refinery Retort Furnace Collection System



Canister Internals

- 150 lb Sulfur impregnated carbon
- Carbon replace every 3 months or when experiencing vacuum problems .

Filterpack Internals

- 12 (4-high, 3-deep), 2"x24"x24" paper cloths
- 12 (4-high, 3-deep), 15"x24"x24" rated as 95% Hg Remediation Filters as rated by Manufacturer .
- 4-high, 3-deep, 1"x24"x24 1/2" angularly stacked "carbon pack" with 3"x48" sulfur impregnated Carbon filling.
- 12 (4-high, 3-deep), 4"x24"x24" paper filters
- 24 x24x12 filter bags

Interlocks

- Insufficient Vacuum at condenser ,
- Fan Failures

Alarms

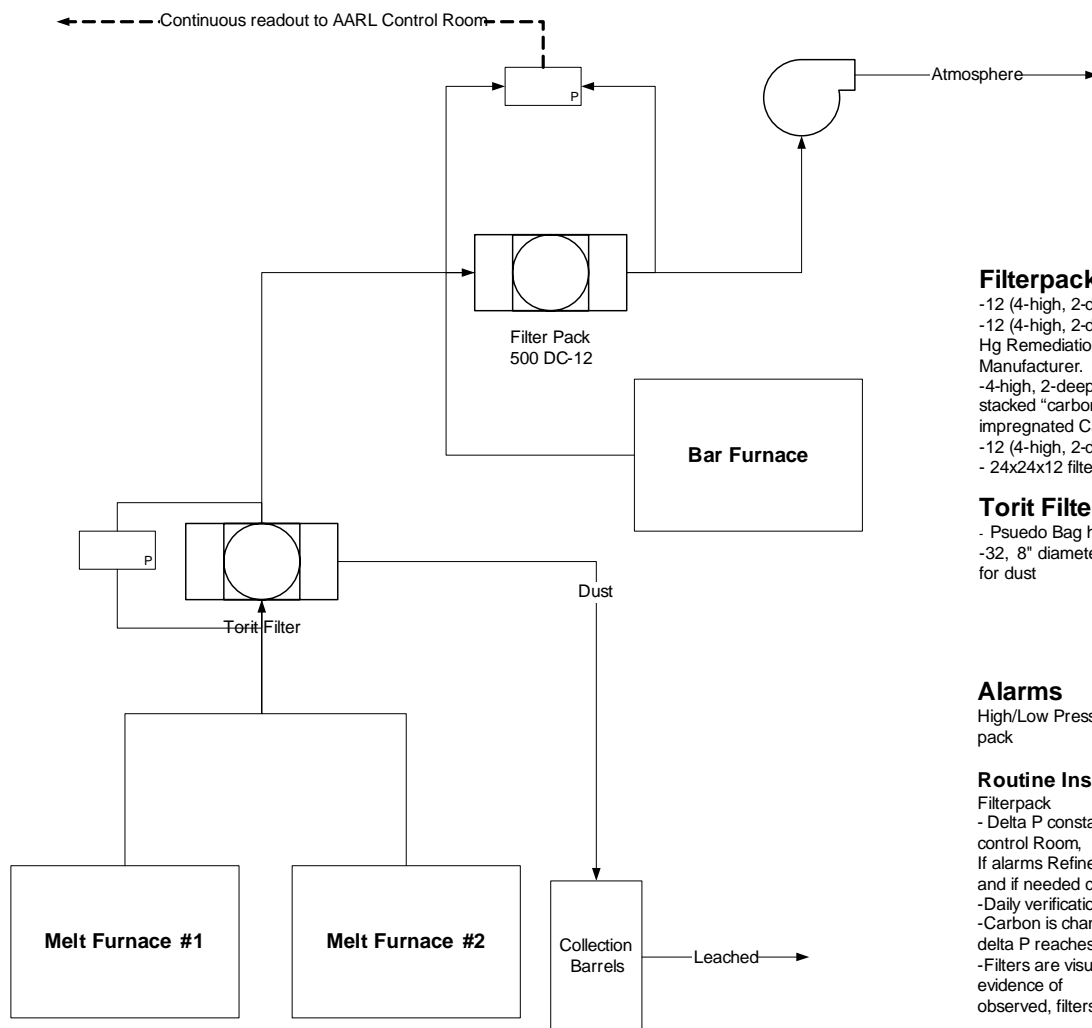
- High/Low Pressure drop across Filter pack

Routine Inspections

- Filterpack
- Delta P constant readout out to AARL control Room ,
- If alarms Refinery operators are notified and if needed called out from home .
- Daily verification by operator
- Carbon is changed annually or when delta P reaches 3"-H₂O
- Filters are visually inspected Weekly , if evidence of plugging is observed , filters are replaced.

Newmont Mining Corporation-Gold Quarry Operations Area Furnaces

Carlin Refinery Furnace Scrubbers



Filterpack Internals

- 12 (4-high, 2-deep), 2"x24"x24" paper cloths
- 12 (4-high, 2-deep), 15"x24"x24" rated as 95% Hg Remediation Filters as rated by Manufacturer.
- 4-high, 2-deep, 1"x24"x24 ½" angularly stacked "carbon pack" with 3"x48" sulfur impregnated Carbon filling.
- 12 (4-high, 2-deep), 4"x24"x24" paper filters
- 24x24x12 filter bags

Torit Filter Internals

- Psuedo Bag house
- 32, 8" diameter x 30" long - 2 deep cloth filter for dust

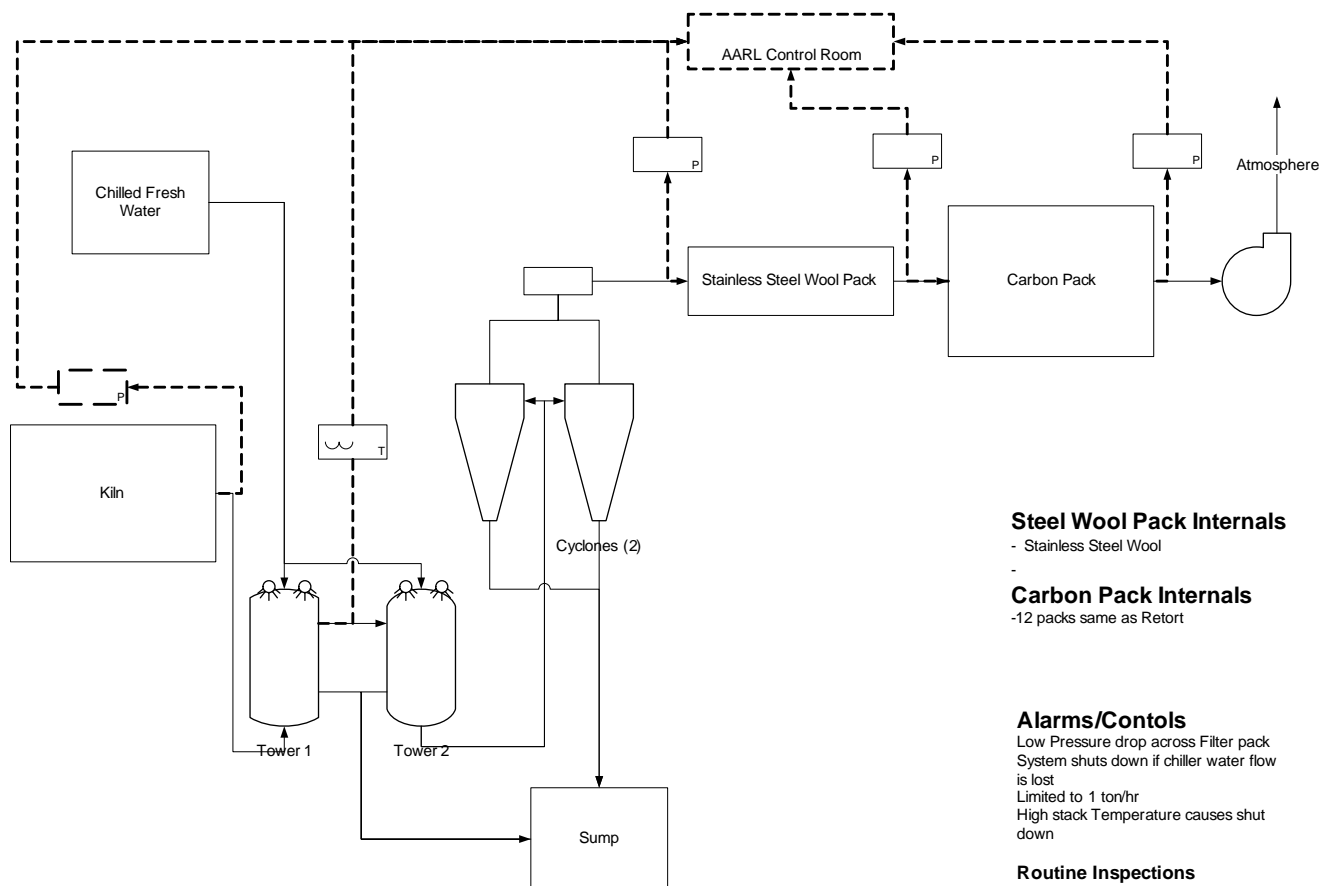
Alarms

- High/Low Pressure drop across Filter pack

Routine Inspections

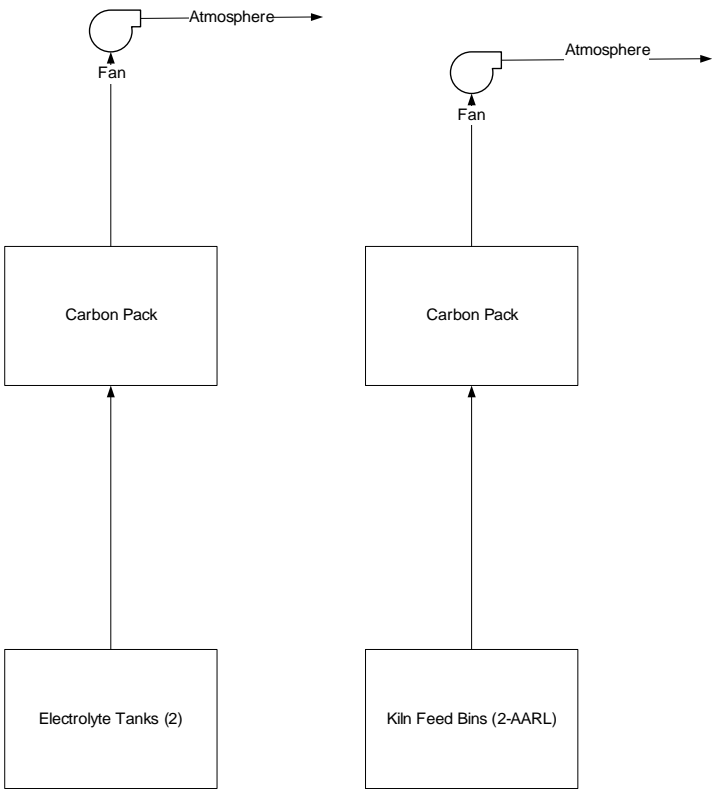
- Filterpack
 - Delta P constant readout out to AARL control Room,
- If alarms Refinery operators are notified and if needed called out from home.
- Daily verification by operator
- Carbon is changed annually or when delta P reaches 7"-H₂O
- Filters are visually inspected Weekly , if evidence of plugging is observed, filters are replaced.

Newmont Mining Corporation-Gold Quarry Operations Area Carbon Kilns



Carlin AARL and Zaddra Kiln Scrubbers

Newmont Mining Corporation-Gold Quarry Operations Area
Electrowinning Pregnant and Barren Tanks



Filter Pack

Internals

- 6, 1"x24"x24" Impregnated Carbon Cartridge

Controls/Alarms

- NA

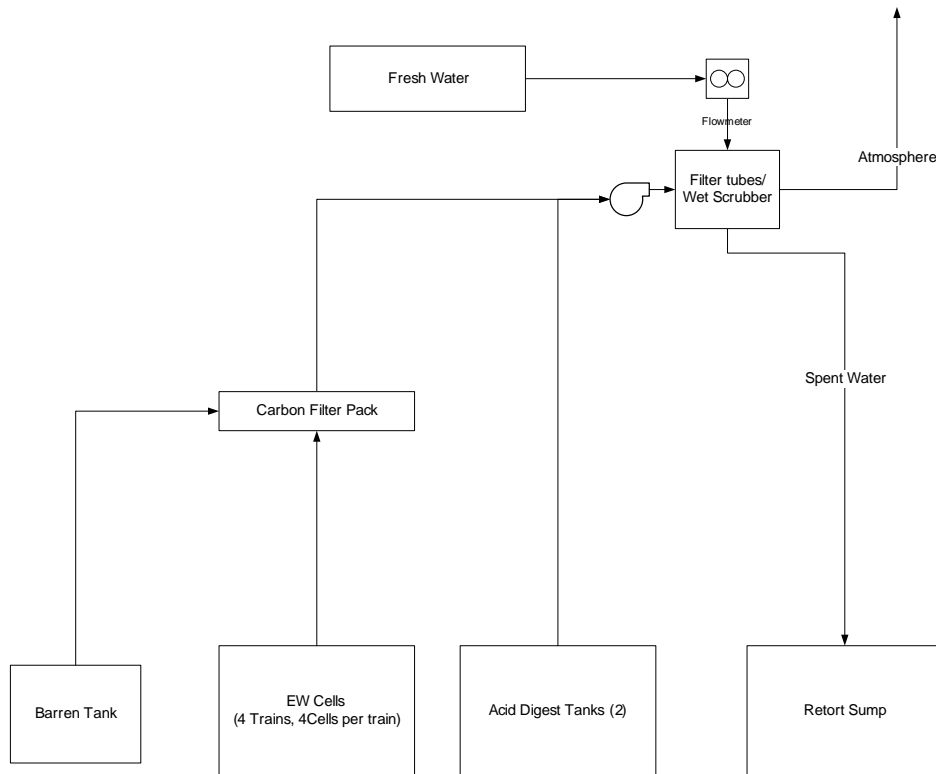
Inspections

- Inspected every 6-months - Replace as needed

Note — The Zaddra Kiln feed bins are not sealed and contained

AARL Electrolyte Tanks and Kiln Feed Bins

Newmont Mining Corporation-Gold Quarry Operations Area Electrowinning Tanks



Barren Tanks is sealed and has high level alarm that reports to AARL control Panel
If it Overflows the solution is collected in a Floor sump that pumps floor sump pumps to 500 TK-44 which pumps to Mill 6 CIL Circuit

Filter Pack

Internals

- 1, 1"x24"x24" Impregnated Carbon Cartridge

Controls/Alarms

- NA

Inspections

- Replace Carbon annually

Filter Tube

Alarms/Controls

- Manually turn water on when digesting
- Fan alarms to Mill 5 Control Room

Internals

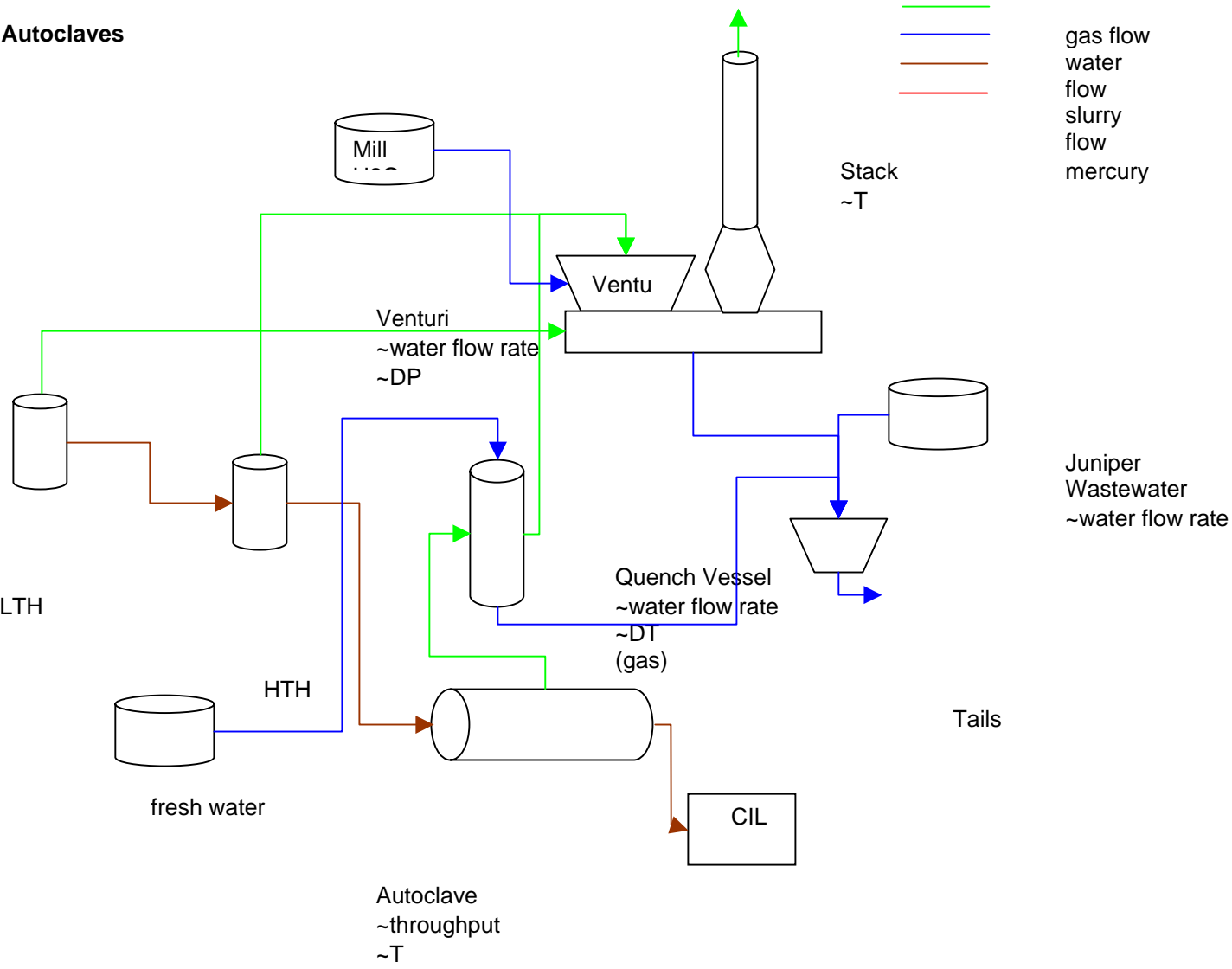
Inspections

Change Filters once per Year (No visible mercury ever found)

Carlin Refinery Acid Scrubber

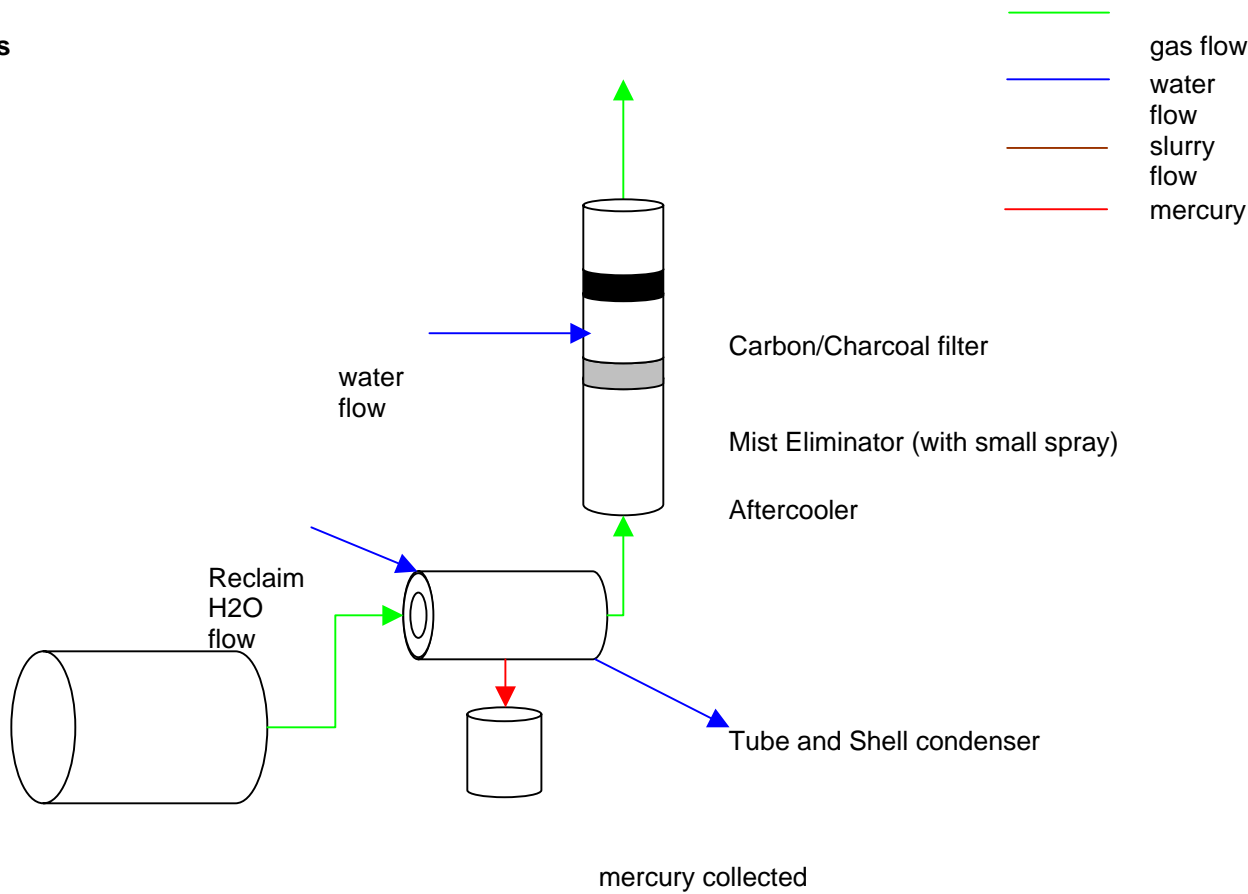
Newmont Mining Corporation-Twin Creeks Mine
Autoclaves, Phases 1+2

Autoclaves



Newmont Mining Corporation-Twin Creeks Mine
Retorts

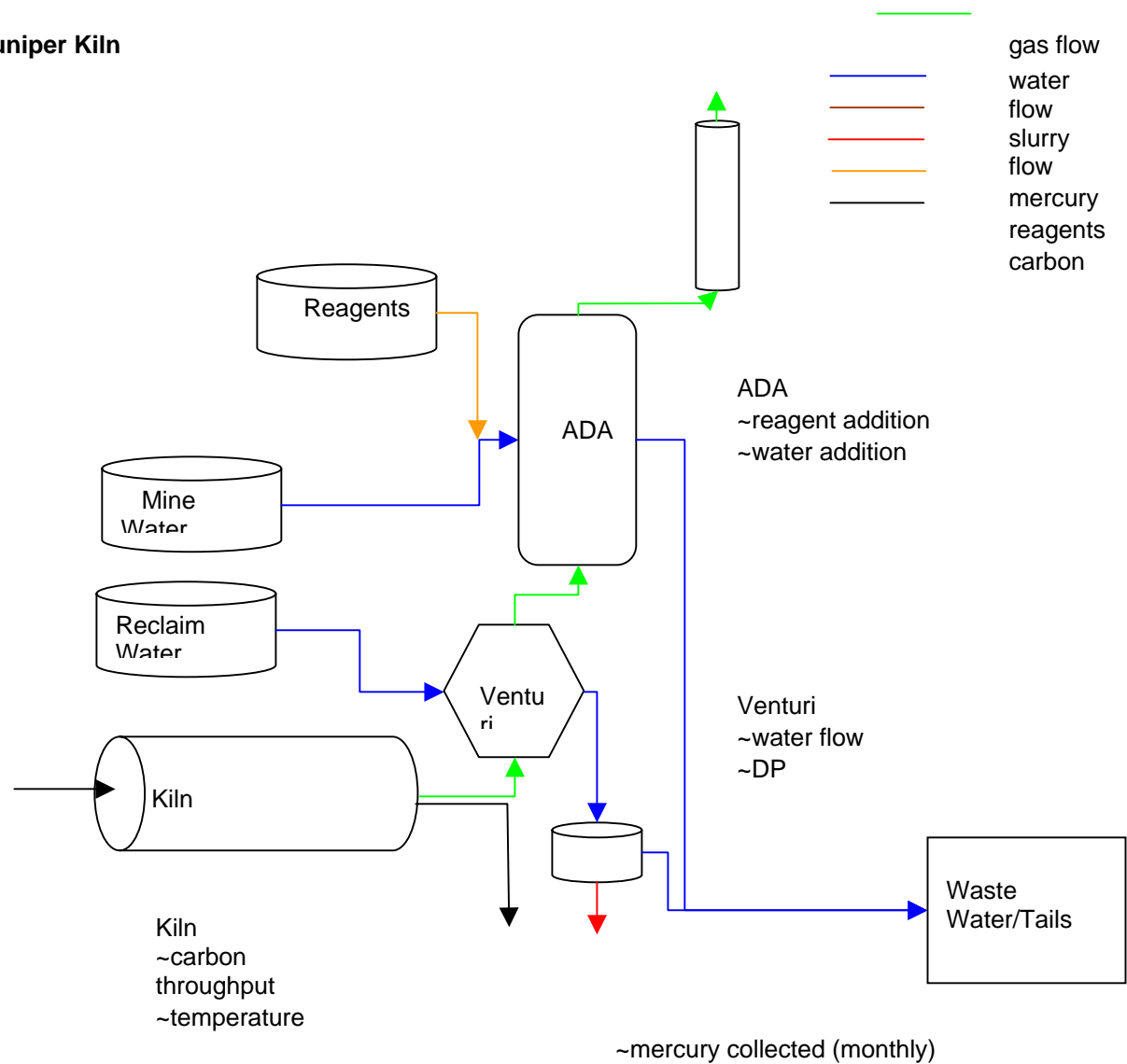
Retorts



Retort
~temperature
~batch size (mercury concentration)

Newmont Mining Corporation-Twin Creeks Mine
Juniper Kiln

Juniper Kiln



Newmont Mining Corporation-Twin Creeks Mine
Juniper Induction Furnaces

Refinery Furnaces

